	Application No.	Applicant(s)	
Notice of Allowability	10/664,548	KUNZ, JAMES A.	
	Examiner	**Art Unit**	
	Brian D. Nguyen	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _12/3/07_.

2. ☒ The allowed claim(s) is/are _1-3,17,15,16,4-6,20,18,19,7,8,11,9,10,21,12-14,22,23 (renumbered 1-23, respectively)_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

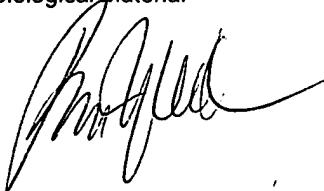   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date _12/4/07 & 1/4/08_

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date _20080106_ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

1/6/08

BRIAN NGUYEN
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

2.   Authorization for this examiner's amendment was given in a telephone interview with

Richa Dhindsa on behalf of Tejinder Singh on 12/31/07.

3.   The application has been amended as follows:

1. (Currently Amended) A method for credit recovery due to lost frames in an in-line

credit extender coupled between a remote device and a local device, where the in-line credit

extender extends credit for the local device, comprising:

determining credit loss due to lost frames by comparing a frame count value with a

primitive count value for a receive segment of the in-line credit extender, the primitive count

value being maintained in a buffer to buffer credit recovery module of the in-line ~~segment~~ credit

extender, the buffer to buffer credit recovery module interfacing with the receive segment of the

in-line extender that receives frames and primitives from the remote device and a transmit

segment of the in-line extender that transmits frames and primitives to the remote device,

wherein ~~the~~ a primitive is sent periodically by the remote device after certain number of frames

are transmitted by the remote device to the local device via the in-line extender, wherein the

credit loss is a difference between the frame count value and the primitive count value for the

receive segment of the in-line credit extender;

storing the credit loss in a buffer at the buffer-to-buffer credit recovery module in the in-line extender;

increasing a transmit frame count based on the credit loss, the transmit frame count is maintained for frames that are transmitted by the in-line extender to the local device and the transmit frame count is maintained by a counter in the buffer to buffer credit recovery module; and

sending the primitive to the local device if the transmit flame count after adding the credit loss matches a primitive count maintained for the transmit segment of the in-line extender by the buffer-to-buffer recovery module.

4. (Currently Amended) A system for credit recovery due to lost frames in an in-line credit extender coupled between a remote device and a local device, the in-line credit extender extending credit for the local device, comprising:

a first counter in a buffer to buffer credit recovery module of the in-line extender, for counting frames received by a receive segment of the in-line extender from the remote device;

a first programmable counter for the receive segment of the in-line credit extender that is programmed with a value;

a comparator for comparing ~~the~~ a first counter value of the first counter and the first programmable counter value when a primitive is received from the remote device, wherein the primitive is sent periodically by the remote device after certain number of frames are transmitted by the remote device to the local device via the in-line extender;

a buffer for storing the difference between the first counter value and the ~~programmed~~ programmable counter value, the difference indicating credit loss due to loss of frames;

a second counter for counting frames transmitted by a transmit segment of the in-line

credit extender; where ~~the~~ a second counter value of the second counter is increased by the

difference between the first counter value and the second counter value; and

a second programmable counter for a primitive count for the transmit segment of the in-

line credit extender, whose value is compared to the second counter value and if there is a match

between the second programmable value and the second counter value, then the transmit segment

of the in-line extender sends the primitive to the local device.

7. (Currently Amended) A method for credit recovery in an in-line credit extender due to

loss of a first primitive used for establishing credit, the in-line credit extender being

operationally, coupled between a remote device and a local device for extending credit for the

local device, comprising:

receiving the first primitive, wherein the in-line extender receives the first primitive from

the remote device;

counting the first primitive using a first counter in a buffer to buffer credit module of the

in-line credit extender;

sending the first primitive from the in-line credit extender to the local device, if ~~the~~ a first

counter value of the first counter is non-zero;

receiving a second primitive from the remote device, the second primitive sent

periodically by the remote device after sending one or more of the first primitive;

setting a flag when the second primitive is received;

transmitting the second primitive to the local device when the first counter value is zero

and the flag is set; and

counting one or more of the first primitive that are received after receiving the first

primitive using a second counter instead of the first counter.

8. (Currently Amended) The method of Claim 7, further comprising:

transmitting one or more of the first primitive when ~~the~~ a second counter value of the

second counter is non-zero.

12. (Currently Amended) A system for credit recovery in an in-line credit extender, due

to loss of a first primitive used for establishing credit, the in-line credit extender being

operationally coupled between a remote device and a local device for extending credit for the

local device, comprising:

a first counter for counting the first primitive;

a second counter for counting one or more of the first primitive that are received after the

in-line credit extender receives a second primitive, the second primitive is periodically sent by

[[a]] the remote device for credit recovery due to loss of the first primitive;

a register that stores a flag, where the flag is set after the second primitive is received;

and

a first primitive control module that transmits the first primitive to the local device when

~~the~~ a first counter value of the fist counter is non-zero or transmits the first primitive to the local

device if the second counter is non-zero, when the second counter is used for counting the first
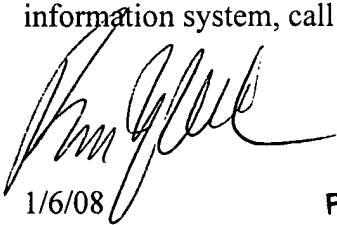
primitive.

Conclusion

4.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BRIAN NGUYEN
PRIMARY EXAMINER

1/6/08